

products. The average prices per physical unit and price changes after the policy varied significantly by manufacturer type: 1.8 EGP (0.26 \$USD) for drugs produced by state-owned companies increased by 238%, 2.3 EGP for domestic-private company products increased by 10%, 13 EGP for multinationals products decreased by 6%, and 41 EGP for imported products increased by 13%. **CONCLUSIONS:** Switching to a reference price policy for pharmaceuticals resulted in considerable percentage increase, on average, for products where a price change occurred. However, the nominal effect was attenuated because the biggest proportional changes occurred on the lowest cost drugs.

PHP60

MEDICATION USE SURVEY OF INPATIENTS WITH BASIC HEALTH INSURANCE FROM 2010 TO 2011 IN CHINA

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OBJECTIVES: To understand hospitalization costs, costs covered by insurance and disease distribution among urban inpatients with basic health insurance (BHI) in China between 2010 and 2011, providing data evidence for the government to improve BHI policies and drug regulation system in the further. **METHODS:** A nationwide, cross-sectional sampling of urban inpatients with BHI was conducted in mainland China. A retrospective analysis was adopted and all results were extrapolated to the whole country according to the population, economics and other factors in the inpatients' cities. The statistics analysis software was SQL Server 2003. **RESULTS:** There were 38.2 million hospitalization cases after extrapolating (sample=375822) in 2011, with an increase of 21.42% than that of the previous year. Three-class hospitals received more hospitalization cases (43.56% of the total) in 2011 than the previous year (40.10% of the total). Average hospitalization cost per visit in 2011 was 8210 RMB, an increase of 1.90% from the previous year. Remarkably, medication expenses accounted for about 49%, which was approximately equal to the previous year. The expenses covered by BHI accounted for 68.39% for each visit, which was higher than that of the previous year. Cerebrovascular disease had the most hospitalization cases (9.11% of the total), followed by cancer, ischemic heart disease, Hypertension and diabetes. The total hospitalization cost of cancer (37.8 billion RMB) was the highest, followed by cerebrovascular disease (32.8 billion RMB) and ischemic heart disease (25.7 billion RMB). **CONCLUSIONS:** The average hospitalization costs per visit and total hospitalization costs all increased. And rational drug use should be still paid more attention since the drug costs percentage was steadily high. Helping inpatients select proper hospitals to see doctors and strengthening the administration of diseases cost highly will be helpful for reducing the medical costs.

PHP61

THE PROMISE OF BIG DATA – DOES THE FINANCIAL INVESTMENT PROVIDE A RETURN ON INVESTMENT FOR SMALL TO MID-SIZE MANUFACTURERS?

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OBJECTIVES: Analysis of large datasets such as claims and health care utilization databases has become a routine way that drug, device and diagnostic manufacturers understand current treatment pathways and project market potential for development products. The time, resources, and costs associated with these data analyses can be a barrier for small- to mid-size companies operating under the pressure of lean development processes. We sought to analyze the current published literature on claims analyses in four therapeutic areas (cardiovascular, ophthalmology, oncology, and women's health) to better understand the size of companies engaging in this type of research. **METHODS:** A literature review of published articles from January 1, 2000 – December 31, 2013 was conducted to better understand the analyses of large datasets being conducted by company size. The data were then abstracted to obtain the following data: therapeutic area, funding support for data analysis, company size, large dataset utilized, approximate cost of obtaining data, approximate cost of analyzing data, approximate US patient population for drug/device/diagnostic under development. **RESULTS:** Analyses of large datasets were just as likely to be conducted by government and academic institutions as private sector organizations (research firms and manufacturers). Of the 35 articles that met inclusion criteria in cardiovascular disease, 19 conducted by private sector organizations. For the 19 analyses conducted by private sector organizations, 3 were conducted by manufacturers, of which two were large pharmaceutical companies and 1 was a nationwide pharmacy chain. **CONCLUSIONS:** None of the claims data conducted by manufacturers were small- to mid-size companies. It is unclear whether this is due to the cost of data and analysis or the desire to have a seemingly unbiased third-party author. Further research is needed to determine why small- to mid-size drug, device or diagnostic manufacturers are not engaging in this type of research.

PHP62

A COMPARATIVE ANALYSIS OF PRIVATE HEALTH INSURANCE SYSTEMS IN UNITED STATES, SOUTH AFRICA AND TURKEY

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OBJECTIVES: This poster presents a comparative analysis of the private health care insurance systems (PHI) in Turkey, United States and South Africa. **METHODS:** OECD publications, Turkish Private Health Insurance Association, World Bank Reports, Publications of Turkish Social Security Institution (SSI) and official web pages of US and South Africa Departments of Health are examined for 2001-2011. **RESULTS:** In comparison to Turkey, United States and South Africa have similar characteristics in terms of PHI dependence prevailing with a higher coverage. Due to lower PHI level in Turkey, Out of Pocket (OOP) payments constitute a significantly higher amount. In Turkey, PHI coverage has almost tripled over the last 10 years, but still accounts only for 3.40 % of the total population. The trend towards strengthening the PHI is basically due to the promotion of PHI solutions such as supplementary coverage

that has been implemented in Turkey since December 2012. Total volume of PHI in Turkey is expected to expand more as the scope of the supplementary health insurance implementation increases. There exists a diminishing trend of OOP expenses across all three countries however this is again relatively much lower for Turkey. Since 2003, Turkey has been implementing a Health Transformation Program where PHI is expected to play a crucial role to reduce OOP health expenditure. Despite this ten-year program, OOP spending has decreased slightly (11%) when compared to South Africa where there is a threefold decrease. **CONCLUSIONS:** Turkey has still room to improve its private insurance system along with its public system to reduce OOP payments. South Africa with private dominant health insurance system and lower OOP spending is trying to transfer its resources towards a national health insurance system. United States stands as a stabilized private dominant health insurance model which significantly differs from Turkey and South Africa.

PHP63

THE ROLE OF BIG DATA IN HEALTH CARE DECISION MAKING: AN ITALIAN EXPERIENCE

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OBJECTIVES: The need to use real-world data to support Health Care decision was the main driver for the Italian Inter-University Consortium (CINECA) to set-up a population-based patient centric database (ARNO Observatory) which integrates big administrative data from National/ Regional Information Systems to monitor health economics, patient's outcomes and measure health performance in the real world. **METHODS:** On a population of almost 12 million, since 1987, ARNO Observatory routinely collects and integrates NHS administrative data for each single patient with high quality and complete information. ARNO provides comprehensive data referred to patient as: demographics, outpatient drug prescriptions, inpatient hospital discharges, imaging and lab tests prescriptions. From ARNO Observatory we carried out analyses of population or on specific cohorts to evaluate prevalence of chronic disease, co-morbidities and cost of total burden of illness. **RESULTS:** From a cohort of 2.5 million of ARNO population, one third subjects has at least one chronic disease during 2012 and this proportion rises with ages (84% in elderly over 80 years). The most common chronic disease is hypertension (23%), followed by COPD/asthma (13%), dyslipidemia (10%) and diabetes (6.3%). Integration of different data flows led to the evaluation of cost of illness which varies from 2.000€ for hypertension or 2.800€ for diabetes to 12.000€ for Acute Coronary Syndrome. Most part of this cost is due to hospitalization (49% vs 40% for drugs and 12% for diagnostic examination and lab tests). Cost of illness is strictly correlated to age and presence of co-morbidities, actually a considerable number of patients has more than one disease (17%), in elderly this percentage rises up to 50%. **CONCLUSIONS:** A big data infrastructure is very important to integrate administrative and clinical data for real world analyses and it is a valid instrument to support clinical governance and clinical research decision making.

PHP64

ENGAGEMENT IN AND FINANCIAL PERFORMANCE OF A TRANSITIONAL CASE MANAGEMENT PROGRAM AMONG MEMBERS ENROLLED IN ADMINISTRATIVE-SERVICES-ONLY INSURANCE ARRANGEMENTS

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OBJECTIVES: Estimate the financial savings associated with participation in a transitional case management (TCM) program offered by Optum. Nurses managed cases via telephone and face-to-face interventions following member's inpatient admission. The program was designed to improve care and help save money by better managing post-discharge care of the participants. **METHODS:** Propensity-score-weighted difference-in-difference multiple regression analyses were used to estimate savings in total health care expenditures associated with active engagement in the CAD program. Factors associated with the program participation and savings were also found via logistic regression. The study included cohorts of 80,032 participants and 29,054 non-participants who qualified for the program between July 2011 and December 2012. Pre- and post-program engagement periods extended for up to 12 months before and after the dates members qualified for the program. Regression models controlled for age, gender, and health conditions along with inferred demographic characteristics such as minority status, education, income, and the supply of health care services in members' zip code of residence. **RESULTS:** The regression-adjusted average cost trend was \$231 lower per member per month for program participants. About 42.4% of the participants were managed in a way that their cost savings exceeded the costs of providing the program. Factors associated with engagement were not always associated with program savings. For example, lower income and lower supply of health care service areas were associated with lower participation rates but higher saving. On the other hand, those with higher risk scores and in higher age group were more likely to engage and also more likely to be managed in a way that lead to savings as well. **CONCLUSIONS:** The TCM program helped to generate savings. Analyses of participation and savings allowed program providers to understand the pockets of program success and streamline future efforts to improve the program.

PHP65

A VALUATION SYSTEM FOR PRIVATE LIFE INSURANCE AND ANNUITY INSURANCE UNDER TAIWAN'S NATIONAL HEALTH INSURANCE SYSTEM

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OBJECTIVES: Taiwan's National Health Insurance, established in 1995, has offered every citizen nearly equal financial access to comprehensive health services and provides all citizens with financial risk protection from large medical expenses. Existing data reported that purchasing private life and annuity insurances is popular in Taiwan, with an average of 2.3 contracts per person and 18% of GDP invested in